

What is claimed is:

Claim 1. A high density coil comprising a wire bundle in which a self-fusible insulated wire having an oval or  
5 hexagonal cross section is wound without a space and which has a substantially honeycomb cross section.

Claim 2. The high density coil according to claim 1, wherein the winding of the self-fusible insulated wire is regular  
10 winding.

Claim 3. The high density coil according to claim 1, wherein an insulated coating film of the self-fusible insulated wire is formed of a resin selected from the group consisting of a  
15 polyimide resin, a polyamideimide resin, a polyesterimide resin, a polyurethane resin and a polyester resin, and the coating insulated film is coated with a self-fusible resin to form the insulated wire.

20 Claim 4. A high density coil according to claim 3 wherein outer edges of two or more of the high density coils are joined with each other.

Claim 5. A method of manufacturing a high density coil,  
25 comprising the steps of:

disposing a core and, if necessary, an outer flame on a pedestal;

fitting, to a core, a coil formed by regularly

winding a self-fusible insulated round wire and pressing the coil in a winding width direction of the coil; and

crushing a space between windings of the coil so that a cross section of a wire bundle forming the coil may be  
5 a substantially honeycomb shape.

Claim 6. A method of manufacturing a high density coil, comprising the steps of:

fitting, to a core, a coil formed by regularly  
10 winding a self-fusible insulated round wire, applying an outer flame to an outer diameter of the coil, and pressing the coil in a winding thickness direction of the coil by using a pressure applicator; and

crushing a space between windings of the coil so  
15 that a cross section of a wire bundle forming the coil may be a substantially honeycomb shape.

Claim 7. The method of manufacturing a high density coil according to claim 6, wherein the outer flame disposed on a  
20 pedestal is another coil.